ABSTRACT

In a method for controlling a primary current in an ignition coil of an internal combustion engine with controlled ignition, the current is established in an inductive primary circuit over a given duration, referred to as the conduction time and determined by calculation and/or as a function of measurements carried out in the primary circuit.

The conduction time is calculated according to the following steps:

- predetermining the predetermined conduction time ($td_i$),
- carrying out at least one measurement of the current ($Ic_i$) in the primary circuit at an instant ($t_i$) lying in the last tenth of the predetermined conduction time ($td_i$),
- estimating the current ($If_i$) at the end of the predetermined conduction time ($td_i$), as a function of the measurement(s) carried out,
- optionally correcting the conduction time ($td_i$) for the ignition cycle during which the last current measurement was carried out, as a function of the previous estimate and the current ($I_{target\ i}$) desired at the end of the conduction time.

Figure 2